



**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

8/A  
9-25-03  
Feed

<b>Applicant:</b>	Ok, et. Al.	<b>Art Unit:</b>	3762
<b>Serial No.:</b>	09/761,270	<b>Examiner:</b>	Dahbour
<b>Filed:</b>	1/16/01		
<b>Docket No.:</b>	S125-USA		
<b>For:</b>	Visual Prosthesis Including Enhanced Receiving and Stimulating Portion		

**Assistant Commissioner  
For Patents  
Mail Stop: Non-Fee Amendments  
P.O. Box 1450  
Alexandria, VA 22313-1450**

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail in an envelope addressed to: Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313 on September 11, 2003.

  
Lisa Cody

**RECEIVED**

**AMENDMENT A**

SEP 24 2003

TECHNOLOGY CENTER R3700

Dear Sir:

In response to the Office Action mailed March 11, 2003, please amend the above-identified patent application as follows:

**INTRODUCTORY COMMENTS**

Claims 1 - 21 are pending in the present application. Claims 1, 2, 6 - 8, 20, and 21 stand rejected under 35 USC 102(b). Claims 3 - 5, 9, and 10 stand objected to as depending from rejected claims. Claims 11 - 19 stand allowed. The drawings stand objected to, and have been corrected per the Examiner's request.



Applicants wish to thank the Examiner for allowance of claims 11 – 19. Applicants have amended claims 1, 6, and 20 to better describe, and particularly point applicants' invention. Applicants have withdrawn claim 21, and added new claim 22.

Applicants have amended claims 1, 6, and 20 to include the limitation "*an electrode array separate from said secondary coil, but electrically coupled to said secondary coil, and configured for implantation in said user's eye.*" Applicants believe that the Michelson design is theoretically possible, but highly impractical, unless used in combination with a double coil as described in applicants US patent application 09/515,383. The efficiency of inductive power transfer is proportional to the size of the coils and the distance between the transmitting and receiving coils. The Michelson design is limited to a coil no larger than the electrode array and placed against the retina. In the design of the present invention, the coil is much larger than the array and placed close to the exterior of the body, either at the front or side of the eye. This allows for more efficient power transfer than allowed by the Michelson design. Efficient power transfer is critical to a visual prosthesis, because a visual prosthesis is battery powered and placed close to the brain. At least a portion of any power loss would be radiated into the brain. The more efficient design of the present invention requires that the electrode array and coil be two separate pieces that are electrically coupled.

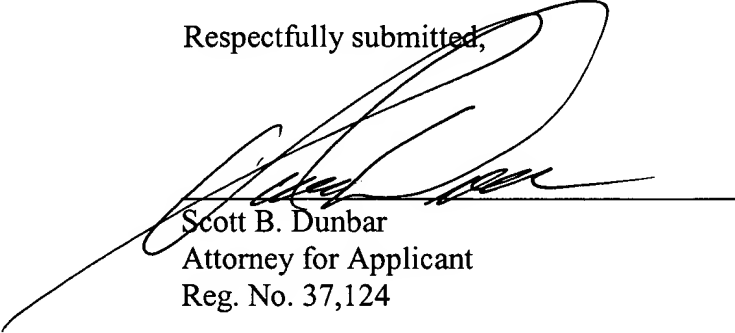
While applicants believe claim 2 is allowable as depending from the amended claim 1, applicants would like to point out the difference between biocompatible and hermetic. Webster defines hermetic as "air tight, impervious to external influence" and biocompatible as "compatible with living tissue or a living system by not being toxic or injurious and not causing immunological rejection." Hence, a device may be biocompatible, but not hermetic, such as an artificial hip joint, or hermetic, but not biocompatible, such as a tin can. Most electronic circuitry contains corrosive elements that are toxic to the human body, not resistant to corrosion in a saline environment, and therefore, not biocompatible. Therefore, electronic circuitry must be encased in a package that is both biocompatible and hermetic for chronic implantation.

If for any reason the Examiner finds the application other than in condition for allowance, and the Examiner believes that a teleconference may be helpful, the Examiner is invited to call the undersigned attorney at (818) 833-5055 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

Date

9/11/03

  
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